REMARKS

This is a full and timely response to the outstanding FINAL Office Action mailed July 8, 2008. The Examiner is thanked for the thorough examination of the present application. Upon entry of this response, claims 1-20 are pending in the present application. Applicant respectfully requests consideration of the following remarks contained herein. Reconsideration and allowance of the application and presently pending claims are respectfully requested.

I. Summary of Telephone Interview with Examiner

Applicant first wishes to thank Examiner Sinkantarakorn for the time spent with Applicant's representative Jeffrey Hsu during a telephone interview conducted on October 6, 2008 regarding the above-identified Office Action. During the interview, the interpretation of various claim terms in addition to potential amendments to the claims were discussed. The Examiner tentatively acknowledged that the previously cited references do not disclose the features included in the amendments currently presented. In view of the telephone interview with Examiner Sinkantarakorn, Applicant respectfully submits that the rejections should be withdrawn. Applicant understands that the Examiner will perform an updated search but does not believe that any such search should reveal new or more pertinent art, as Applicant understands that the first search was conducted in accordance with MPEP 904 et seq., and was therefore complete.

II.   Response to Claim Rejections Under 35 U.S.C. § 102

It is axiomatic that "[a]nticipation requires the disclosure in a single prior art reference of each element of the claim under consideration." *W. L. Gore & Associates, Inc. v. Garlock, Inc.,* 721 F.2d 1540, 1554, 220 USPQ 303, 313 (Fed. Cir. 1983). Therefore, every claimed feature of the claimed invention must be represented in the applied reference to constitute a proper rejection under 35 U.S.C. § 102.

Claims 1, 5-8, 10-15, 17, 19 and 20 stand rejected under 35 U.S.C. §102(e) as allegedly being anticipated by *Aimoto* (U.S. Pat. No. 6,570,876).   For at least the reasons set forth below, Applicant traverses these rejections.

A. Independent Claim 1

Applicant respectfully submits that independent claim 1 patently defines over *Aimoto* for at least the reason that *Aimoto* fails to disclose, teach, or suggest the features emphasized below in claim 1.

Claim 1, as amended, recites (emphasis added):

> 1. An apparatus for improving the management of received data packets of a host system that comprises a plurality of data buffers and a plurality of descriptors that corresponds to a subset of the plurality of data buffers to manage the received data packets, the apparatus comprising:
>   a receiver for receiving a data packet;
>   a first storage unit for storing the data packet from the receiver;
>   ***a counter for counting a number of descriptors in a first state to produce a count value***;
>   a second storage unit for storing a threshold value; and
>   a comparator for comparing the count value with the threshold value and producing a comparison signal;
>   wherein the apparatus issues a first event to the host system according to the comparison signal.

Consistent with the discussion held during the telephone interview, Applicant respectfully requests that the rejections be withdrawn for at least the reasons that follow. As emphasized during the interview, Applicant respectfully submits that claim 1 recites a counter for _counting_ a number of descriptors in a first state to produce a count value and that the cited *Aimoto* reference fails to disclose, teach, or suggest this feature. Also, Applicant has amended claim 1 to provide proper antecedent basis for "a number of descriptors in a first state."

During the interview, Applicant discussed the arguments set forth by the Examiner in the Response to Arguments section. The Examiner rejected the Applicant's prior arguments and based the rejection on a broad interpretation of the term "descriptor" recited in claim 1. In particular, the Examiner asserts that the total packet length taught by *Aimoto* corresponds with the descriptor. The Examiner further interpreted "a first state" to read on a state where a bandwidth value is assigned to the queue groups. Based on this line of reasoning, the Examiner argued that "the number of descriptors in a first state" can be broadly interpreted as the number of the packet length of the queue groups that are assigned a bandwidth value. (Office Action, page 9). For the "counter" recited in claim 1, the Examiner refers to the counter area (63) taught by *Aimoto*.

Applicant respectfully traverses the rejection and submits that the counter in *Aimoto* serves a completely different function than that of the counter recited in claim 1. *Aimoto* discloses "a counter area 63 for counting the length of transmission data read out from each queue group." (Emphasis added; col. 10, lines 33-34). This is clearly different from "a counter for monitoring a number of descriptors in a first state to

9

produce a count value." In an effort to clarify the function of the counter in claim 1 (and in view of the discussion with the Examiner), Applicant has amended claim 1 to now recite "a counter for <u>counting</u> a number of descriptors in a first state to produce a count value" and submits that *Aimoto* fails to disclose, teach, or suggest this feature. As set forth in the Interview Summary above, the Examiner agreed that the *Aimoto* fails to disclose this feature.

Accordingly, Applicant respectfully submits that independent claim 1 patently defines over *Aimoto* for at least the reason that *Aimoto* fails to disclose, teach, or suggest the highlighted features in claim 1 above. Furthermore, Applicant submits that dependent claims 5-8 and 10 are allowable for at least the reason that these claims depend from an allowable independent claim. *See, e.g., In re Fine*, 837 F. 2d 1071 (Fed. Cir. 1988).

B. Independent Claim 11

Applicant respectfully submits that independent claim 11 patently defines over *Aimoto* for at least the reason that *Aimoto* fails to disclose, teach, or suggest the features emphasized below in claim 11.

Claim 11, as amended, recites (emphasis added):

> 11. A method for improving the management of received
> data packets of a host system that comprises a plurality of data
> buffers and a plurality of descriptors that corresponds to a subset of
> the data buffers to manage the received data packets, the method
> comprising:
> receiving a data packet;
> transferring the data packet into at least one of the data
> buffers;
> ***counting an amount of the descriptors in a first state***;

10

comparing the amount with a threshold value to generator a comparison signal; and
generating a first event to the host system according to the comparison signal to prevent all the descriptors from being in the first state.

On page 2 of the Office Action, the Examiner rejects claims 1 and 11 together. While the claims are not coextensive in scope, the Applicant submits arguments similar to those set forth above for claim 1.   Applicant has amended claim 11 to recite "counting an amount of the descriptors in a first state" and submits that *Aimoto* fails to disclose, teach, or suggest this feature.   At most, *Aimoto* discloses a counter area (63) that counts the length of transmission data read out from each queue group.   This, however, is different from the feature recited above in claim 1.

Accordingly, Applicant respectfully submits that independent claim 11 patently defines over *Aimoto* for at least the reason that *Aimoto* fails to disclose, teach, or suggest the highlighted features in claim 1 above.   Furthermore, Applicant submits that dependent claims 12-15 and 17 are allowable for at least the reason that these claims depend from an allowable independent claim.   *See, e.g., In re Fine*, 837 F. 2d 1071 (Fed. Cir. 1988).

III.   **Response to Claim Rejections Under 35 U.S.C. § 103**

The USPTO has the burden under section 103 to establish a *prima facie* case of obviousness according to the factual inquiries expressed in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966).   The four factual inquires, also expressed in MPEP §2141, are as follows:

(A)   Determining the scope and contents of the prior art;

11

(B)   Ascertaining the differences between the prior art and the claims in issue;

(C)   Resolving the level of ordinary skill in the pertinent art; and

(D)   Evaluating evidence of secondary considerations.

For a proper rejection of the claim under 35 U.S.C. §103, the cited combination of references must disclose, teach, or suggest all elements / features of the claim at issue. See, e.g., *In re Dow Chemical*, 5 U.S.P.Q.2d 1529, 1531 (Fed. Cir. 1988) and *In re Keller*, 208 U.S.P.Q.2d 871, 881 (C.C.P.A. 1981).   Claims 2 and 3 stand rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over *Aimoto* in view of *Tsujimoto* (U.S. Pat. No. 6,700,887).   Claims 4, 9, 16, and 18 stand rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over *Aimoto* in view of *Kataria* (U.S. Pat. No. 7,177,279).   For at least the reasons set forth below, Applicant traverses the rejections set forth.

A. Independent Claim 18

Applicant respectfully submits that independent claim 18 patently defines over *Aimoto* in view of *Kataria* for at least the reason that the combinations fails to disclose, teach, or suggest the features emphasized below in claim 18.

Claim 18, as amended, recites (emphasis added):

> 18. A method for improving the management of data packets received from a network by a host system that comprises a plurality of data buffers and that utilizes a plurality of descriptors that corresponds to a subset of the plurality of data buffers to manage the data packets received from the network, the method comprising:
> receiving a data packet from the network;
> transferring the data packet into at least one of the data buffers;
> ***counting a number of descriptors that will have their state changed when the data packet is transferred***;

calculating a count value according to the number of descriptors that will have had their state changed by the data packet being transferred; and

comparing the count value with a threshold value, and triggering a first event to the host system when the count value reaches the threshold value;

wherein the first event notifies the host system to clear the data buffers corresponding to the descriptors.

In rejecting claim 18, the Examiner continues to rely on the *Aimoto* reference to allegedly disclose the step of monitoring a number of descriptors that will have their state changed when the data packet is transferred. In doing so, the Examiner cites the same text passages cited for claims 1 and 11 and again refers to the counter area (63) in *Aimoto*. As indicated above, Applicant has amended claim 18 to now recite "counting a number of descriptors that will have their state changed when the data packet is transferred" and submits that the *Aimoto* reference fails to disclose, teach, or suggest this feature. Moreover, the secondary *Kataria* reference fails to address this deficiency.

Accordingly, Applicant respectfully submits that independent claim 18 patently defines over *Aimoto* in view of *Kataria* for at least the reason that the combination (either individually or in combination) fails to disclose, teach, or suggest the highlighted features in claim 1 above. Moreover, Applicant submits that dependent claims 19 and 20 are allowable for at least the reason that these claims depend from an allowable independent claim. *See, e.g., In re Fine*, 837 F. 2d 1071 (Fed. Cir. 1988).

B. Dependent Claims 2, 3, 4, 9, and 16

As set forth above, independent claim 1 is allowable over the *Aimoto* reference. Applicant respectfully submits that the *Tsujimoto* reference fails to remedy the deficiencies expressed above for *Aimoto*. Thus, for at least the reason that independent claim 1 is allowable over *Aimoto*, claims 2 and 3 are allowable over *Aimoto* in view of *Tsujimoto* as a matter of law. Regarding claims 4 and 9, Applicant respectfully submits that the *Kataria* reference fails to remedy the deficiencies expressed above for *Aimoto* with respect to independent claim 1. For at least the reason that independent claim 1 is allowable over *Aimoto*, claims 4 and 9 are allowable over *Aimoto* in view of *Kataria* as a matter of law.

Applicant respectfully submits that the *Kataria* reference fails to remedy the deficiencies expressed above for *Aimoto* with respect to claim 11. For at least the reason that independent claim 11 is allowable over *Aimoto*, claim 18 is allowable over *Aimoto* in view of *Kataria* as a matter of law. *Id.*

CONCLUSION

Applicant respectfully submits that all pending claims are in condition for allowance. Favorable reconsideration and allowance of the present application and all pending claims are hereby courteously requested. If, in the opinion of the Examiner, a telephone conference would expedite the examination of this matter, the Examiner is invited to call the undersigned attorney at (770) 933-9500.

No fee is believed to be due in connection with this amendment and response to Office Action. If, however, any fee is believed to be due, you are hereby authorized to charge any such fee to deposit account No. 20-0778.

Respectfully submitted,

/Daniel R. McClure/

_____

Daniel R. McClure
Reg. No. 38,962

THOMAS, KAYDEN, HORSTEMEYER
   & RISLEY, L.L.P.
600 Galleria Parkway S.E.
Suite 1500
Atlanta, Georgia 30339
(770) 933-9500